January 27, 1969

RAILWAY AGE

THE TRANSPORTATION WEEKLY

Tomorrow's railroad won't be today's.

It won't look like today's.

It won't act like today's.

It won't think like today's. Or, to be more precise, it won't suffer the gap between thought and action that sometimes characterizes today's railroads and their operation.

Tomorrow's railroad will be a magnificent piece of transportation machinery. It

continued on page 37

TOMORROW'S RAILROADS No. 1

COMING NEXT WEEK: What America's railroads must do to make their terrific potential a reality. First of 12 installments. Full of the enterprise and know-how that make Railway Age "what management needs to know to manage."

Now 3 Great Names

Symington Leading manufacturer of passenger and freight car components.

Waugh Innovator in freight and passenger car cushioning and custom engineered components.

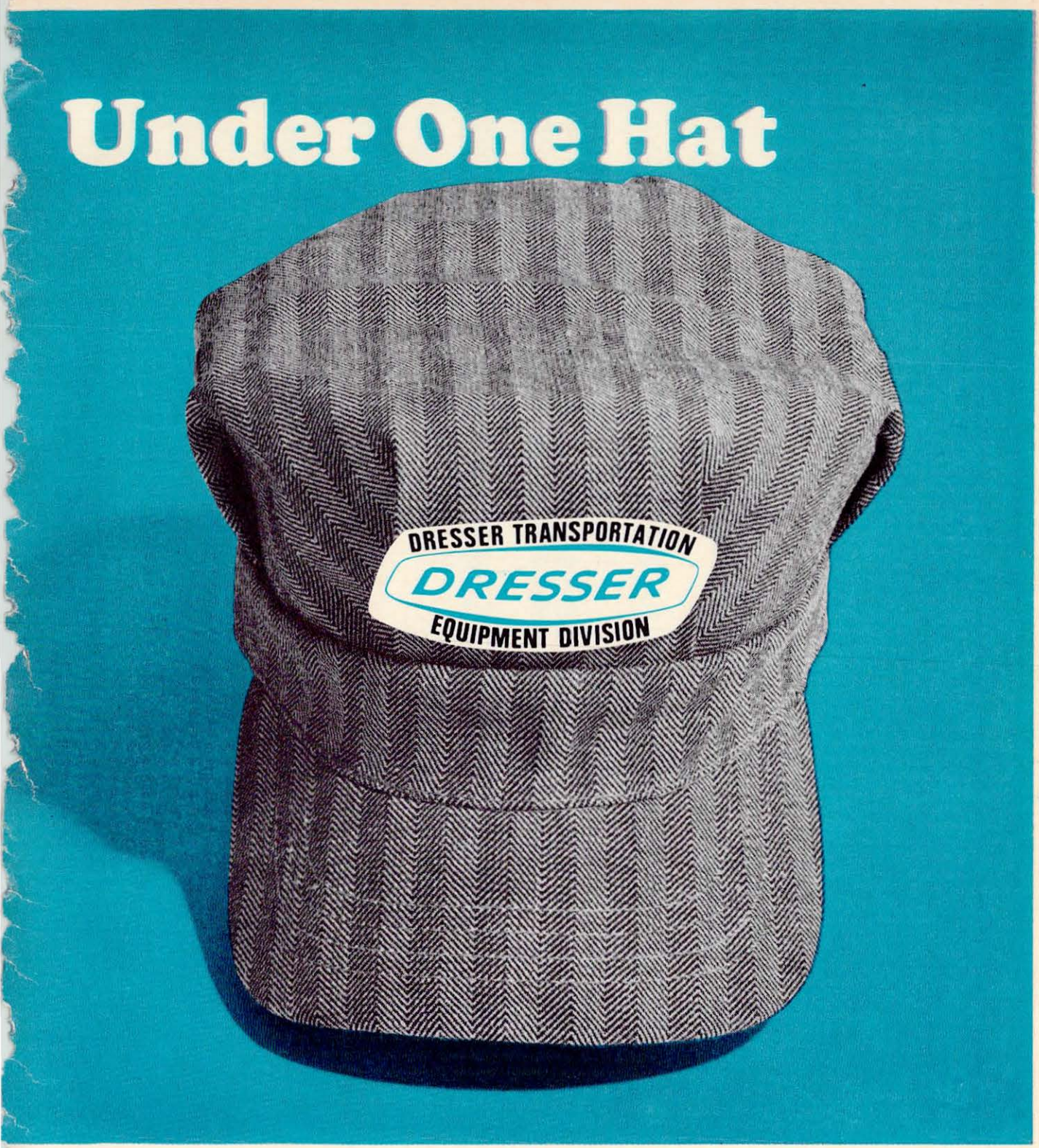
Dresser One of the world's major industrial corporations with more than 850 products and services.

Take two of the most respected names in railroading—*Symington and Waugh*. Combine their talents and resources with the skills and resources of *Dresser Industries*. Good things just naturally have to happen.

Symington and *Waugh* Products now will be marketed by the *Dresser Transportation Equipment Division of Dresser Industries, Inc.* Our combined sales-service staff offer you better service on a larger variety of car components. Our production facilities are being modernized to meet the growing needs of the dynamic railroad industry.

We appreciate your past business and look forward to serving your needs in the future. Our new "one hat" concept will help us do a better job.

Under One Hat



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Circle 25 on coupon page 103

1968 LOCOMOTIVE ORDERS (Continued)

Purchaser	No.	Wheel Arrangement	Service	Weight Lb.	Horsepower	Order Date	Delivery Date	Builder
Clinchfield	1	C-C	Rd. Sw.	400,000	3,000	May	Sept.	EMD
	6	C-C	Frt.	392,000	3,000	Oct.	Jan. '69	EMD
Colorado & Southern	4	C-C	Frt.	375,000	3,000	Jan.	2nd. Qtr.	General Electric
	9	C-C	Rd. Sw.	400,000	3,000	.....	Apr.	EMD
Columbia & Cowlitz	1	B-B	Rd. Sw.	250,000	1,500	.....	.....	Alco
Delaware & Hudson	16	B-B	Frt.	270,000	2,300	Mar.	3rd. Qtr.	General Electric
Denver & Rio Grande Western	4	C-C	Gen. Pur.	390,000	3,600	Jan.	Mar.	EMD
	3	B-B	Sw.	247,000	1,000	Jan.	May	EMD
Detroit Edison	1	B-B	Sw.	230,000	1,000	.....	Sept.	EMD
Detroit, Toledo & Ironton	6	B-B	Rd. Sw.	266,000	3,000	.....	June	EMD
Eastman Kodak	1	B-B	Sw.	230,000	1,000	.....	Dec.	EMD
Erie Lackawanna	6	C-C	Frt.	392,000	3,300	Mar.	June	General Electric
	14	C-C	Rd. Sw.	400,000	3,600	Mar.	May	EMD
Ford Motor Co.	5	B-B	Sw.	230,000	1,000	.....	Oct.	EMD
Georgia Railroad	2	B-B	Gen. Pur.	245,000	3,000	Apr.	July-Aug.	EMD
Great Northern	9	C-C	Rd.	400,000	3,600	.....	July	EMD
	6	C-C	Frt.	390,000	3,300	Oct.	2nd Qtr. '69	General Electric
Illinois Central	10	....	Gen. Pur.	350,000	3,300	Jan.	Apr.-May	General Electric
	6	....	Gen. Pur.	350,000	3,300	Feb.	May	Alco
Indiana Harbor Belt	6	B-B	Sw.	250,000	1,500	.....	June	EMD
Indianapolis Union	1	B-B	Sw.	250,000	1,500	.....	Oct.	EMD
Inland Steel	3	B-B	Sw.	250,000	1,500	.....	May	EMD
Kaiser	5	C-C	Frt.	420,000	3,000	Jan.	1st. Qtr.	General Electric
Kansas City Southern	8	C-C	Rd. Sw.	400,000	3,000	.....	Aug.	EMD
	14	B-B	Sw.	250,000	1,500	.....	Aug.	EMD
Lake Terminal	1	B-B	Sw.	230,000	1,000	.....	Sept.	EMD
Long Island	8	B-B	Rd. Pass.	240,000	2,000	.....	.....	Alco
Louisville & Nashville	5	C-C	Frt.	380,000	3,000	Nov.	Mar. '69	EMD
	14	C-C	Frt.	380,000	3,000	Nov.	Mar.-June '69	General Electric
Minneapolis, Northfield & Southern	2	C-C	Rd. Sw.	400,000	2,300	Aug.	Sept.	EMD
Minnesota Transfer	1	B-B	Sw.	250,000	1,500	.....	Mar.	EMD
Missouri-Kansas-Texas	4	B-B	Sw.	240,000	1,500	June	Sept.-Oct.	EMD
	17	B-B	Frt.	233,000	3,000	June	Sept.-Oct.	EMD
Missouri Pacific	4	C-C	Frt.	390,000	3,000	Oct.	2nd Qtr. '69	General Electric
	20	C-C	Frt.	368,000	3,000	Oct.	Jan.-Feb. '69	EMD
Monongehela Connecting	1	B-B	Rd. Sw.	250,000	1,500	.....	.....	Alco
	1	B-B	Sw.	230,000	1,000	.....	.....	Alco
Newburgh & South Shore	2	B-B	Sw.	230,000	1,000	.....	.....	Alco
Penn Central	155	B-B	Road	277,000	3,000	Aug.-Oct.	Aug.-Dec.	EMD
	5	C-C	Frt.	388,650	3,600	Aug.	Aug.	EMD
	66	B-B	Frt.	277,000	3,300	Sept.-Oct.	Oct.-Dec.q	General Electric
	44	C-C	Frt.	393,650	3,300	Aug.	Aug.-Sept.	General Electric
	66	B-B	Frt.	275,000	3,300	July-Oct.	3rd-4th Qtr. '69	General Electric
	4	C-C	Frt.	390,000	3,300	July-Oct.	3rd-4th Qtr. '69	General Electric
Pennsylvania-Reading Seashore Lines	5	B-B	Frt.	260,000	2,000	Dec.	Feb.-Mar. '69	EMD
River Terminal	2	B-B	Sw.	230,000	1,000	.....	Sept.	EMD
St. Louis-San Francisco	3	C-C	Frt.	386,000	3,600	July	Oct.	EMD
	16	B-B	Sw.	248,000	1,500	July	Oct.	EMD
	4	B-B	Frt.	254,800	3,000	July	Nov.	General Electric
St. Louis Southwestern	12	B-B	Sw.	250,000	1,500	.....	Mar.	EMD
	27	C-C	Road	400,000	3,600	.....	Feb.	EMD
Seaboard Coast Line	14	C-C	Rd.	400,000	3,600	.....	Oct.	EMD
	13	B-B	Frt.	270,000	3,000	June	1st Qtr. '69	General Electric
	3	B-B	Frt.	272,000	3,000	.....	.....	Alco
Soo Line	10	C-C	Frt.	368,000	3,000	Nov.	Mar. '69	EMD
Southern	30	B-B	Sw.	250,000	1,500	.....	Nov.	EMD
Southern Pacific	18	B-B	Sw.	250,000	1,500	.....	June	EMD
	18	C-C	Road	410,000	2,300	.....	Aug.	EMD
	10	C-C	Road	410,000	3,000	.....	Apr.	EMD
	33	C-C	Road	410,000	3,600	.....	Feb.	EMD
Spokane, Portland & Seattle	4	C-C	Frt.	348,000	3,600	Apr.	Dec.	Alco
	2	B-B	Sw.	239,000	1,500	Apr.	Dec.	Alco
Tennessee, Alabama & Georgia	1	B-B	Rd. Sw.	256,000	2,000	.....	Feb.	EMD
Union Pacific	25	....	Frt.	.....	6,600	Oct.	May-Aug. '69	EMD
	20	....	Frt.	.....	5,000	Dec.	1969-1970	General Electric
Various Industrial	6	....	Sw.	.....	150-550	Apr.-Nov.	Oct. '69-July '69	General Electric
Western Maryland	2	B-B	Sw.	410,000	3,000	July	Nov.	EMD
Western Pacific	4	B-B	Frt.	.....	3,000	June	Sept.	General Electric
	10	B-B	Frt.	.....	3,000	Nov.	Apr. '69	General Electric
Western Railway of Alabama	1	B-B	Gen. Pur.	245,000	3,000	Apr.	July	EMD
	26	B-B	Gen. Pur.	245,000	3,000	Dec.	Mar. '69	EMD
Weyerhaeuser Timber	1	B-B	Sw.	250,000	1,500	.....	May	EMD
Wisconsin Electric	1	B-B	Sw.	230,000	1,000	.....	July	EMD
Youngstown Sheet & Tube	3	B-B	Sw.	230,000	1,000	.....	May	EMD

1968 LOCOMOTIVE ORDERS—CANADIAN DOMESTIC

Purchaser	No.	Wheel Arrangement	Service	Weight Lb.	Horsepower	Order Date	Delivery Date	Builder
British Columbia Hydro & Power Authority	1	B-B	Gen. Pur.	240,000	1,000	July	Mar. '69	GMD Ltd
Canadian National	50	C-C	Gen. Pur.	390,000	3,000	Nov.	Feb.-Dec. '69	GMD Ltd
Canadian Pacific	8	C-C	Frt.	390,000	3,000	Jan.	July-Oct.	MLW-Worthington
Quebec Iron & Titanium	1	B-B	Gen. Pur.	260,000	1,800	Jan.	June	MLW-Worthington
White Pass & Yukon	7	B-B	Rd.	272,000	1,200	.....	.....	MLW-Worthington

1968 LOCOMOTIVE ORDERS—FOREIGN

Purchaser	No.	Wheel Arrangement	Service	Weight Lb.	Horsepower	Order Date	Delivery Date	Builder
Chile	1	C-C	Gen. Pur.	184,000	1,500	Aug.	Dec.	EMD
	2	B-B	Gen. Pur.	134,000	1,000	Jan.	Apr.	EMD
	1	B-B	Gen. Pur.	134,000	1,000	Aug.	Dec.	EMD
Congo	1	C-C	Rd.	180,000	1,300	Jan.	Aug.	General Electric
Guatamela-United Fruit	2	B-B	Sw.	130,000	600	May	Dec. '69	General Electric
Holland	6	B-B	Sw.	200,000	.....	Oct.	May '69	General Electric

1968 LOCOMOTIVE ORDERS—FOREIGN (Continued)

Purchaser	No.	Wheel Arrangement	Service	Weight Lb.	Horsepower	Order Date	Delivery Date	Builder
Indian State Railways	30	C-C	Gen. Pur.	16,000	1,200	.....	Sept. '68-Feb. '69	EMD
Korea National Railways	20	B-B	Sw.	230,000	1,000	Sept.	Jan. '69	MLW-Worthington
	10	C-C	Gen. Pur.	218,000	2,000	Sept.	Mar. '69	EMD
Mexico	29	C-C	Gen. Pur.	368,000	3,000	Jan.	June	EMD
Mexico-Altos Hornos	1	B-B	Sw.	160,000	550	July	Jan. '69	General Electric
Mexico-Ferrocarril Del Pacifico	4	C-C	Rd.	343,000	2,750	.....	.....	Alco
Mexico-Koppers	1	B	Sw.	40,000	.....	May	July '69	General Electric
Mozambique	16	C-C	Rd.	200,000	2,000	Apr.	Sept.	General Electric
Panama-United Fruit	1	B-B	Sw.	130,000	600	June	Dec.	General Electric
South Africa	3	B-B	Gen. Pur.	134,000	1,000	Sept.	Apr. '69	EMD
Zambia-Nchanga Mine	1	B-B	Gen. Pur.	113,000	1,000	Aug.	Apr. '69	EMD

1968 PASSENGER-CAR ORDERS

Purchaser	No.	Type	Length Ft.	Length In.	Construction	Seating Capacity	Weight	Order Date	Delivery Date	Builder
Canadian Pacific	0	Gallery Coach Push-Pull	85	..	Stainless Steel	156-168	110,000	Mar.	July-Sept. '69	Canadian Vickers Ltd.
Chicago & North Western	16	Gallery Double Deck	85	..	Alloy Steel	161	121,575	Jan.	July-Sept.	Pullman-Standard
	4	Gallery Double Deck Cab Control	85	..	Alloy Steel	155	126,825	Jan.	Sept.	Pullman-Standard
Massachusetts Bay Transit Authority	24	Rapid Transit	69	6	Steel	60	70,000	Feb.	Apr.-May '69	Pullman-Standard
	52	Rapid Transit	69	6	Steel	64	67,000	Feb.	June-Aug. '69	Pullman-Standard
New York City Transit Authority	400	Rapid Transit	60	2½	Aluminum/Steel	44	.....	Feb.-Aug.	1969	General Steel Industries
New York Metropolitan Transportation Authority	350	Coach (MU)	85	..	Steel	122	180,000 per pair	July	Nov. '70	Budd Co.
Southern Pacific	15	Bi-level Coach	85	..	Steel	164	138,850	Jan.	Oct.-Dec.	Pullman-Standard

Fixed property improvements

Canadian National's expenditure of $86 million for constructing a 438-mile line from near Grimshaw, Alta., to Pine Point, N.W.T., made "new tracks" the leader of all categories for fixed-property expenditures in 1968. Class I railroads in the United States and Canada spent 39% of the total funds allotted to fixed property for new tracks, according to reports submitted to Railway Age. A close second in cost are yard-and-terminal improvements with 34% of the total, showing that railroads are cognizant of the shortcomings of these facilities and are doing something about them. The third category, costwise, is line changes with 11% of the total.

A large number of railroads reported their plans for fixed-property improvements for 1969. These reports show that yards and terminals will get the major attention, with 24% of the total funds to be allotted. This is followed by line changes with 19%, new mechanical facilities with 17% and bridges and piers with 14% of the total planned expenditures.

Following are brief descriptions of the improvement projects authorized for 1969 and which are estimated to cost $100,000 or more.

AUTHORIZED FOR 1969

Ann Arbor: Install 15.6 miles of TCS between Alexia, Ohio, and Diann, Mich., and extend Samaria passing siding, $250,000.

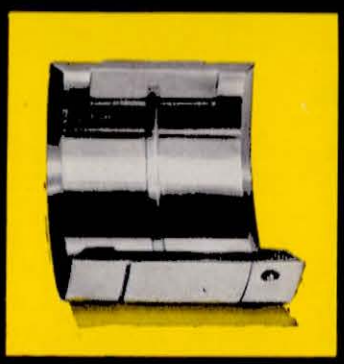
Bessemer & Lake Erie: Construct additional coal-handling facilities at Conneaut, Ohio, $1,700,000.

Boston & Maine: Make signal interlocking alterations at Springfield, Mass., account of track changes, $135,000.

Central of New Jersey: Completely reconstruct four-lane overhead highway bridge No. 5/15 near Bayonne, N.J., including the removal of the existing structure and work on the approaches, $393,000; completely reconstruct the overhead footbridge at 25th street, Bayonne, $120,000; replace the turntable at Jersey City, N.J., with a wye track, erect a building to cover the inspection pit and relocate the wheeltruing machine at Elizabethport, N.J., $213,000; expand the through-bulk terminal at Elizabethport by constructing tracks, paving, drainage and handling facilities, $199,000; install remote control equipment from "DY" interlocking to Newark Bay Bridge, $216,000; install remote-control equipment from "HY" interlocking to Phillip St. interlocking at Jersey City, $114,000; install remote-control equipment and single track a section of the EP&PA branch, $699,000; complete the reconstruction of two-lane overhead highway bridge No. 10/13 at Rockaway, N.J., $150,000; complete the reconstruction of two-lane overhead highway bridge No. 4/20 in Madison Township, $277,000; remove Line Road grade crossing and construct parallel road, Matawan Township, $127,000; and install 12 sets of automatic crossing gates at Asbury Park, N.J., $580,000.

Chesapeake & Ohio/Baltimore & Ohio: Install piggyback facilities at South Charleston, W. Va., $453,500; install additional track facilities at Stotesbury, W. Va., $221,750; install weigh-in-motion scales at Torchlight, Ky., $236,568; upgrade signal and communications pole line circuits from Grand Rapids, Mich., to Benton Harbor, $296,240; make track changes in yard at Saginaw, Mich, $132,000; make changes to the interlocking and tracks at Saginaw, $119,100; construct auto-loading facilities at Wayne, Mich., $748,100; construct resthouse for trainmen at Holloway, Ohio, $224,000; eliminate grade crossing at Akron, Ohio, $168,670; make alterations and additions to yard tracks in Cincinnati, Ohio, $234,100; make changes to the interlocking crossovers and tracks at Hamilton, Ohio, $127,050; expand the yard at North Excello, Ohio, $256,580; construct "head-on" connection at Cincinnati $408,700; and construct track

(Continued on page 94)



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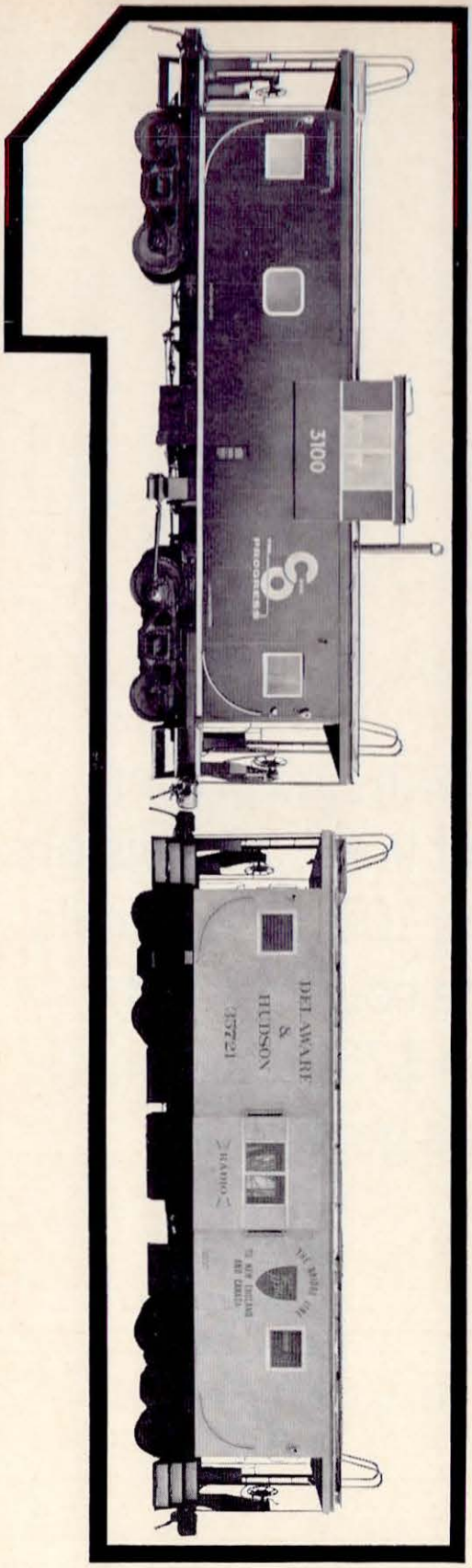

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Circle 32 on coupon page 70

(Continued from page 91)

to serve Patuxent Park development at Guilford, Md., $238,060.

Chicago & Eastern Illinois: Construct 200-car capacity siding 10,250 feet long at Altamont, Ill.; extend three yard tracks at Salem, Ill.; extend 11 tracks in the 26th Street yard in South Chicago Heights, Ill.; install 103 miles of modified CTC signaling between Woodland Jct. and Findley, Ill.; and install floodlighting at the 25th and Canal Street TOFC and truck-service facilities, Chicago.

Chicago & North Western: Install spot car-repair facilities at Green Bay, Wis., $215,000; install car washer at California Avenue, Chicago, $183,000; construct connection to Lake Street elevated, Chicago, $400,000; install CTC from Pioneer to South Pekin, Ill., $356,000; install CTC from Madison to Glen, Wis., $170,000; install microwave from Oelwein, Iowa, to Des Moines, $489,000; install microwave from Clinton, Ill. to Marshalltown, $320,000; and install hotbox detectors at various locations, $158,000.

Chicago, Burlington & Quincy: Construct bridge at Mile Post 171.64 near Galva, Ill., $218,000; construct bridge at Mile Post 32.97 west of Chalco, Nebr., $110,160; construct yard facilities at Des Moines, Iowa, $471,800; construct consolidated office building and interchange trackage and other facilities at Gibson, Nebr., $624,150; recondition portion of Clyde enginehouse at Cicero, Ill., $115,000; enclose portion of car-repair building and install heating and fire protection facilities in same at Havelock, Nebr., $110,000; and construct inspection pit and overhead shelter at Lincoln, Nebr., $224,300.

Chicago, Milwaukee, St. Paul & Pacific: Complete project involving the further upgrading of the teleprinter network, $229,000.

Detroit, Toledo & Ironton: Install 39.76 miles of CTC from Lang Yard to Ecorso, Md., $600,000.

Grand Trunk Western: Replace ballasted-deck trestle with steel-pile ballasted-deck structure at Battle Creek, Mich., $139,000; construct new freight office building at the west end of train yard at Pontiac, Mich., $251,000; and construct completely new car-repair facilities at train yard in Pontiac, $392,000.

Great Northern: Construct TOFC facility at Minneapolis, Minn., $300,000; extend siding at Temple, N.D., $110,000; extend sidings for CTC in 1970 between Ephrata and Lamona, Wash., $130,000; extend yard at Longview Junction, Wash., $258,000; extend sidings for CTC in 1970 between Everett and Bellingham, Wash., $425,000; install sheet piling on east side of

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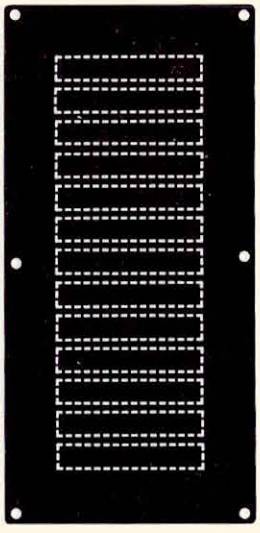
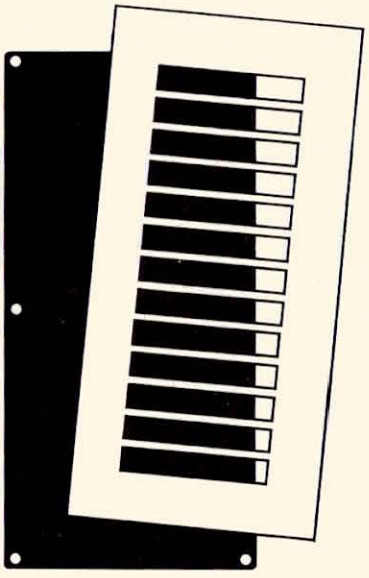


2. Want plates with printed outlines?

Fast, accurate application is assured by having the outlined position for each module printed on every plate. Saves time and labor.



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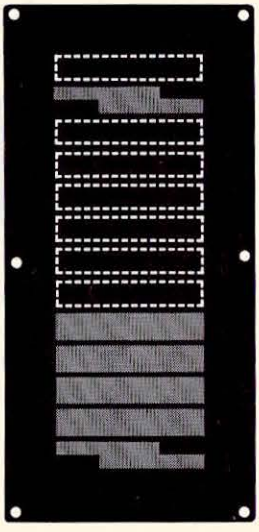

4. Or we can do part or all of the module application.

We can pre-apply the basic modules or, if you prefer, all 13 modules. Since you're fighting time and/or weather, you'll be glad to get this extra help.

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Dock No. 4 at Allouez, Wis., $110,000; daylight tunnel No. 1.5 to improve clearances at Blacktail, Mont., $305,000; replace freight house at Havre, Mont., $240,000; construct bridging over city sewer in anticipation of changes to yard facilities in 1970 at Interbay, Wash., $100,000; replace manually operated tower with remote controlled tower at Soo Line crossing in Minot, N.D., $180,000; install fourth signal aspect between Glascow, Mont., and Havre, $160,000; install CTC from Whitefish, Mont., to Radnor, $500,000; install CTC from Troy to Ripley Mont., $325,000; and replace old style signals with color-light signals and install fourth signal aspect from Marysville to Vernon, Wash., $115,000.

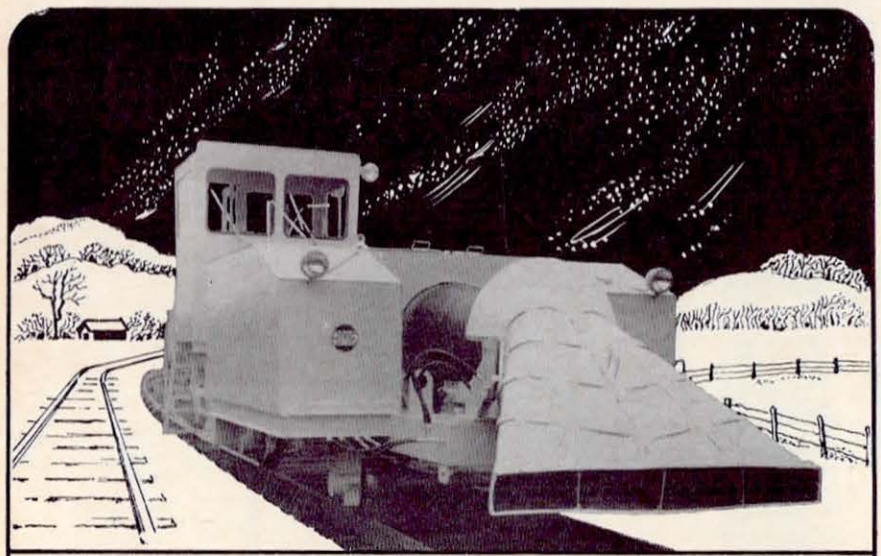
Gulf, Mobile & Ohio: Reconstruct north approach of bridge over Warrior river near Tuscaloosa, Ala., $603,000; and install traffic-control system between Odell, Ill., and Pequot, Ill., and between Percy, Ill., and Tolson, $386-000.

Illinois Central: Relocate car-repair and storehouse facilities to Markham yard Chicago, $6,400,000; and renew drawspan bridge and its approaches at Pass Manchac, La., $1,500,000.

Louisville & Nashville: Modernize crossing protection at 11 crossings in Nashville, Tenn., by replacing manually operated protection with automatic protection with gates, $167,000; install microwave system from Louisville to Nashville, $590,000; and extend existing industrial lead to serve industries at New Johnsonville, $224,000.

Missouri Pacific: Replace timber trestle bridge No. 2650 on east track at Newport, Ark., with reinforced-concrete trestle; replace timber trestle bridge No. 207.4 at McFaddin, Tex., with reinforced-concrete trestle; replace timber trestle bridge No. 20.4 at Highlands, Tex., with reinforced-concrete trestle; construct second main track between Olyphant, Ark., and Grand Glaize; upgrade communication line wires for Phase I of three-phase project on Eastern and Western districts; construct consolidated TOFC and freight facilities at Memphis, Tenn.; and construct diesel locomotive inspection and light-repair shop at North Little Rock, Ark.

Richmond, Fredericksburg & Potomac: Transfer track from northbound assembly yard to southbound receiving yard at Potomac yard, $105,000; consolidate AF, AY and WD controls at dispatcher's office at Richmond, Va., $483,400; and make track changes in Acca yard to accommodate merger of SAL and ACL at Richmond, $1,050,000.



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RMC Snow Blowers

Circle 38 on coupon page 103

Northern Pacific: Make track changes at north end of Rice's Point and south lead, including sewer connection at Duluth, Minn., $260,000; construct freight terminal and classification yard, including TOFC and shop facilities at Northtown, Minn. (five-year program), $250,000; construct additional tracks in Michigan yard along West Marginal Way, Seattle, Wash., $770,000; relocate leads and replace No. 7 turnouts with No. 9 turnouts at south end of Middle Yard in Seattle, $483,000; make track changes required in West Marginal Way account of street widening Seattle, $226,260; construct new track for 125 cars with crossover in center of track to main line and spring switch at east end, Sumas, Wash., $115,120; track work in yard at Longview, Wash., $214,860; construct line change at Colgate, Wash., $212,000; realign curve No. 79 at Heron, Mont., to allow 60 mph, $264,450; install CTC between Northtown and Coon Creek, Minn., $333,400; install hotbox detectors between Glendive and Forsyth, Mont., $102,930; install hot box detectors between Livingston and Helena, Mont., $102,930; install weigh-in-motion scale and computer control for car routing speed control, distance to go, perpetual car inventory, selective locate and print-out inventory at Pasco, Wash., $2,100,000; install block signal system from Woodinville to Wilburton, Wash., $130,000; install CTC from Seattle to Tacoma, Wash., $310,000; install power-operated switches on four existing No. 11 crossover switches, two on east end of Nelson-Bennett tunnel and two on west end of Ruston tunnel, $150,000; install space diversity on microwave system between Seattle and Castle Rock, Wash., $150,000; install microwave facilities between Billings, Mont. and Seattle, $1,000,000; install automatic car-identification scanners at Pasco and Northtown, $100,000; construct freighthouse and extension to yard office at Pasco, $400,000; modernize two tracks at car-cleaning facility, Pasco, $150,000; construct new freight warehouse truck dock with office, supporting trackage, NPT garage facilities, truck scale and parking facilities at South Seattle, $1,430,000; and construct new enginehouse and servicing facilities at Pasco, $230,000.

Penn Central: Reconstruct bridge No. 0-153 at Sea Breeze N.Y., to provide a bascule span over the inlet to Irondequoit Bay, $1,200,000; relocate tracks and other facilities at Springfield, Ohio, account of flood-control project $590,000; relocate tracks and other facilities at Youngstown, Ohio, account of flood-control project, $400,000; relocate tracks and other facilities so as to cross the Welland Canal by means of a tun-

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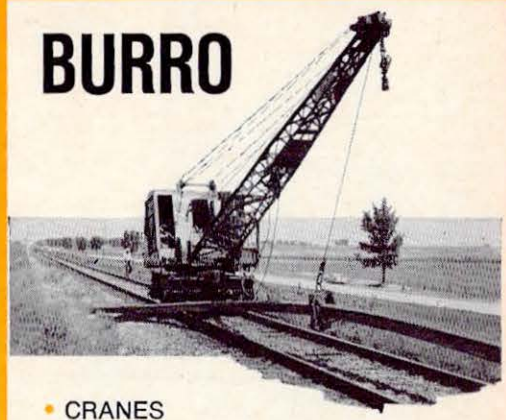

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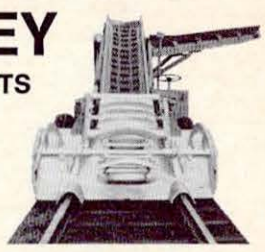

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Circle 37 on coupon page 103

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Circle 33 on coupon page 103

nel, Welland, Ont., $10,000,000; construct facilities for stream-pollution abatement at Indianapolis Ind., $237,000; construct freight-handling facilities at West 30th Street, New York, $1,540,000; construct facilities for stream pollution abatement at Beacon Park yard, Beacon Park, Mass., $150,000; construct facilities for stream pollution abatement at Robert R. Young yard at Elkhart, Ind., $160,000; change Bay View yard at Baltimore to flat-switching, $1,260,000; change Edgemoor yard at Wilmington, Dela., to flat-switching $1,350,000; expand Burns Harbor yard at Portage, Ind., $564,000; install retarders in yard at Morrisville, Pa., $1,760,000; install inspection pit at coach yard in Chicago, $131,000; install additional drivers and by-pass on coal facilities at Ashtabula, Ohio, $525,000; expand the Robert R. Young yard at Elkhart, $273,000; construct new bridge at Washington Street, Steubenville, Ohio, $140,000; expand Sterling yard at Warren Mich., $556,000; replace retarders at Enola, Pa., $198,000; construct supporting yard at Brownstown, Mich., $274,000; construct additional tracks at Middletown, Ohio, $225,000; and expand Warner yard at Monroe, Mich., $233,000.

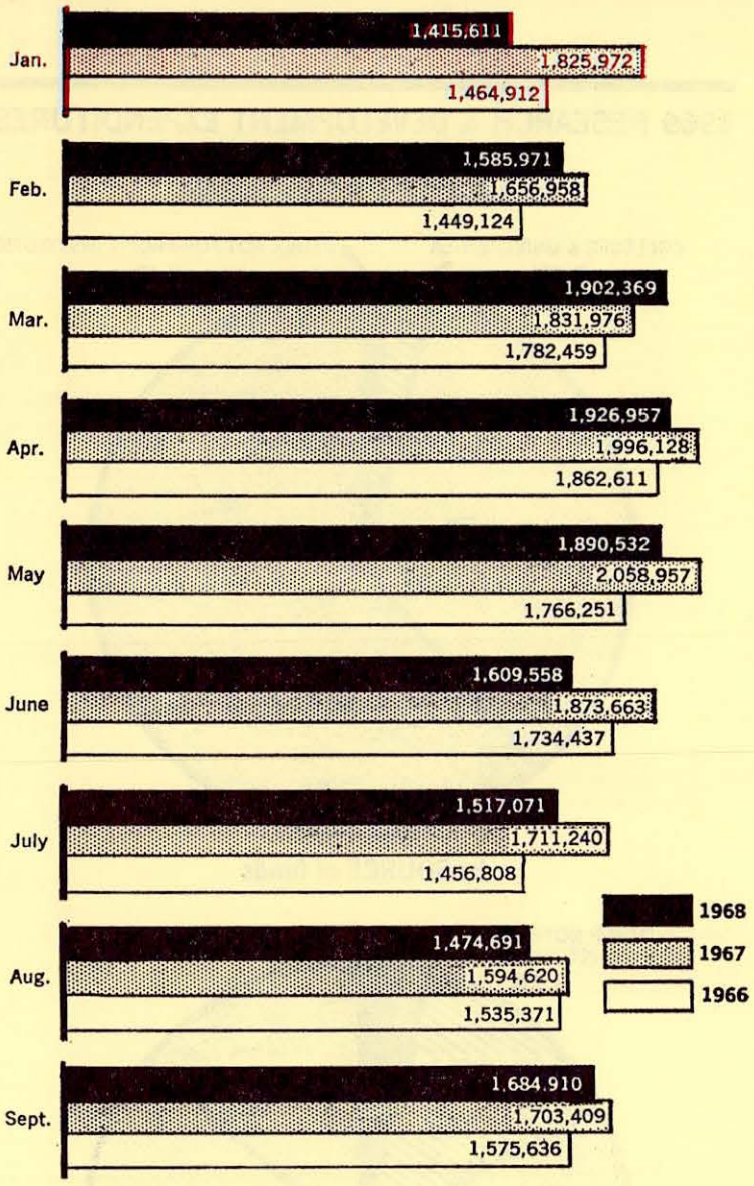
Pennsylvania-Reading Seashore: Reconstruct bridge No. 13.06 at Lindenwold, N.J., carrying tracks over Clementon-Gibbsboro Road, $215,650; modify bridge No. 26.35 at Winslow Township, N.J.

Seaboard Coast Line: Reconstruct N.E. Cape Fear drawbridge at Wilmington, Dela., $250,000; convert two open-deck trestles to ballast deck at Remini, S.C., $118,000; and construct lead and set-off track to serve Celanese Fibers Co. at Timmonsville, S.C., $161,500.

Union Pacific: Construct fully automated rail-welding plant at Laramie, Wyo., including 1.88 miles of additional yard trackage and equipping three rail trains to handle the long strings, $1,663,300; acquire additional right of way and construct line change at Rock River, Wyo., $1,425,700; and construct additional trackage and rearrange existing westbound main track at North Platte, Nebr., $844,000.

Western Pacific: Replace four open-deck bridges with ballasted-deck structures, replace three open-deck bridges with metal pipes, accomplish Phase II of program to strengthen existing steel bridges for heavier loading, $287,000; construct extension to Twain siding and Sloat siding, $225,000; provide microwave communication between Sacramento and Portola, Calif., $365,000; and construct five-mile pipe line in Stockton, Calif., to move oil from the Southern Pacific pipe-line terminal to WP diesel facilities, $245,000. ■

MILES PER HOTBOX SETOFF



Source: Latest available figures from Operations and Maintenance Dept., Mechanical Division, AAR.

Current Statistics

Net income, Class I roads	
Nine months, 1968	$386,000,000
Nine months, 1967	342,200,000
New freight cars on order	
Nov. 1, 1968	21,395
Nov. 1, 1967	21,062
New freight cars delivered	
10 months, 1968	47,595
10 months, 1967	72,490
Serviceable cars	
Dec. 1, 1968	1,385,269
Dec. 1, 1967	1,414,632

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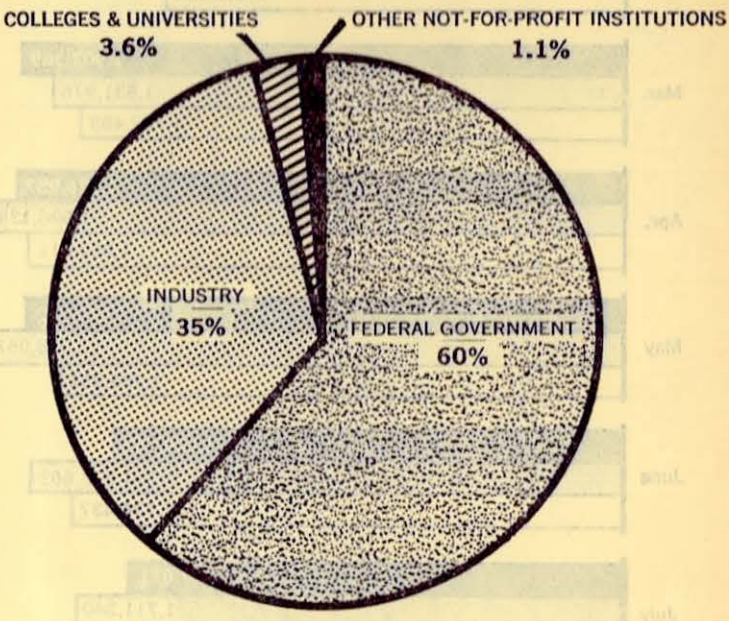
(FORECAST TOTAL: $25.9 BILLION)



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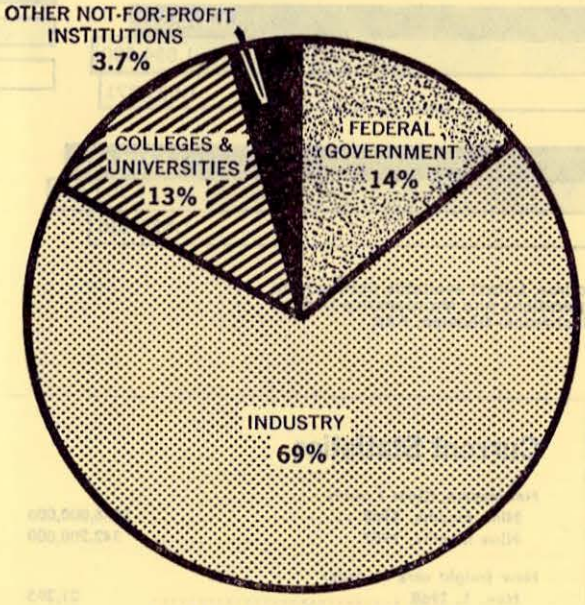


by PERFORMANCE of R&D

Source: Battelle Memorial Institute, Columbus Laboratories.

MARKET OUTLOOK

CARLOADINGS

Loading of revenue freight for the week ended Jan. 11 totaled 497,017 cars, the AAR announced on Jan. 16. This was an increase of 82,878 cars, or 20.0%, compared with the previous holiday week; an increase of 8,247 cars, or 1.7%, compared with the corresponding week last year; and a decrease of 45,287 cars, or 8.4%, compared with the equivalent 1967 week. Ton-miles generated by carloadings in the week ended Jan. 11 are estimated at 13.5 billion, an increase of 2.2% above the corresponding 1968 week, and 3.5% below the 1967 week.

PIGGYBACK CARLOADINGS

U. S. piggyback loadings for the week ended Jan. 4 totaled 17,484 cars carrying 28,648 trailers, compared with 18,252 cars carrying 29,989 trailers in the corresponding 1968 week.

IN CANADA

Carloadings for the seven-day period ended Dec. 21 totaled 69,061 cars, compared with 73,061 for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd. from Connections
Totals for Canada		
Dec. 21, 1968	69,061	23,383
Dec. 21, 1967	67,374	22,547
Cumulative Totals		
Dec. 21, 1968	3,678,496	1,203,969
Dec. 21, 1967	3,718,872	1,208,640

FREIGHT-TRAIN CARS

● *Erie Lackawanna.*—Ordered 698 freight cars at a total cost of $9.8 million. Greenville Steel Car will build 575 gondola cars of five types; Ortner is building 50 gondola cars of two types; Magor Car is building 50 low-deck flat cars; and Fruit Growers Express is building 23 foam-insulated grocery cars. John P. Fishwick, chairman, said the awards are part of a planned $25.5 million capital spending program by E-L in 1969, of which $19 million will go toward equipment purchases (RA, Jan. 6/13, 1969, p. 35).

● *Monon.*—Will acquire 100 100-ton, 2,970-cu-ft-capacity covered hopper cars valued at more than $1.3 million from ACF. Cars will be equipped with four 30-in. round hatches and two gravity outlets. Deliveries are scheduled to begin in March.

● *Trailer Train.*—Ordered 93 60-ft. flat cars from Pullman-Standard and 32 89-ft., 4-in. flats from Bethlehem.

● *Orders and deliveries.*—Orders were placed in November 1968 for 9,641 new freight cars, compared with 9,800 in October and 6,209 in November 1967. Rebuilds ordered in November totaled 1,000 cars, compared with 620 in October and 2,291 in November 1967. Backlog of new cars on order and undelivered on Dec. 1, 1968, was 26,934, compared with 21,395 on Nov. 1 and 21,816 on Dec. 1, 1967.

FREIGHT TRAIN CARS DELIVERED AND ORDERED IN NOVEMBER AND BACKLOG OF ORDERS ON DECEMBER 1, 1968

DELIVERED

	Nov., 1968	Oct., 1968	Nov., 1967
Built New by Car Builders	2,670	3,319	3,958
Built New in R.R. Shops	1,427	1,214	1,164
Built New—Total	4,097	4,533	5,122
Rebuilt	1,106	1,345	1,528
TOTAL DELIVERED	5,203	5,878	6,650

ORDERED

To be built New by Car Builders	7,841	6,782	3,365
To be built New in R.R. Shops	1,800	3,018	2,844
To be built New—Total	9,641	9,800	6,209
To be rebuilt	1,000	620	2,291
TOTAL ORDERED	10,641	10,420	8,500

ON ORDER AND UNDELIVERED

	Dec. 1, 1968	Nov. 1, 1968	Dec. 1, 1968
To be built New by Car Builders	21,221	16,055	13,718
To be built New in R.R. Shops	5,713	5,340	8,098
To be built New—Total	26,934	21,395	21,816
To be rebuilt	4,489	4,595	9,802
TOTAL ON ORDER	31,423	25,990	31,618

NEW FACILITIES

● *Northern Pacific*—Fixed-property budget for 1969 will include the cost of preliminary planning and design work on a projected five-year program for construction of an $18-million freight classification yard, including TOFC and shop facilities, at Northtown, Minn.

YOU OUGHT TO KNOW

IC increases '69 spending to $72 million

Railroad capital improvements will account for about $72 million out of a total Illinois Central Industries 1969 capital-spending budget of $91.2 million. Approximately $19.4 million will go for expansion and modernization of plant facilities of Abex Corp., recently merged with ICI. IC railroad improvements in 1968 involved expenditure of more than $68 million; the '69 program will be the second largest in IC history, topped only in 1967.

Ford Motor Co. still working on auto-train

The auto-train project for carrying motorists and their automobiles is still alive. Ford Motor Co. is still interested in the concept. And a redesign of the hardware has been made by Ford to make it more economically competitive, says Foster L. Weldon, director of Ford's Transportation Research and Planning Office. Consideration is also being given to a "Pullman-company type operation." Weldon indicated that Ford will soon be talking with several railroads about possible auto-train routes and operations. The original route planned for the system was Washington-Jacksonville, Fla.

REMSA names new exec secretary, exhibit director

Lawrence D. McGuan is the new executive secretary and director of exhibits of the Railway Engineering-Maintenance Suppliers Association, succeeding the late W. J. Joy (RA, Dec. 16, 1968, p. 38). McGuan, a veteran trade-publication reporter and editor, most recently was managing editor of Oil Daily.

RI reorganizes, expands TOFC sales operation

A "spectacular rise" in Rock Island's piggyback business —from $15.2 million in revenues in 1966 to about $25 million in '68—has led to a reorganization and expansion of the TOFC sales effort. Howard S. Ownley, general manager-TOFC service, said the moves will involve creation of an assistant general manager's job in Chicago, establishment of three new sales divisions at Cleveland, Memphis and Kansas City, and the addition of 15 more salesmen to the TOFC sales force at 13 on-line and off-line cities.

SP creates new department for intermodal services

Southern Pacific is consolidating all container - trailer/flatcar operations into a single department, to be headed by Thomas A. Fante as general manager of trailer-container flatcar services-system. SP said the move was being made because of "the constantly growing importance and complexity of intermodal transportation." Fante has been vice president and general manager of Southern Pacific Marine Transport, Inc., a position he will continue to hold.

Savannah getting multi-product bulk terminal

The Georgia Ports Authority is expanding bulk handling of multiple products with a new facility at its Garden City Terminal in Savannah. Soros Associates of New York and Robert and Company Associates of Atlanta are the designers and will supervise engineering and construction. The new terminal provides for simultaneous movements between carriers and permits storage until reclaiming by forwarders.

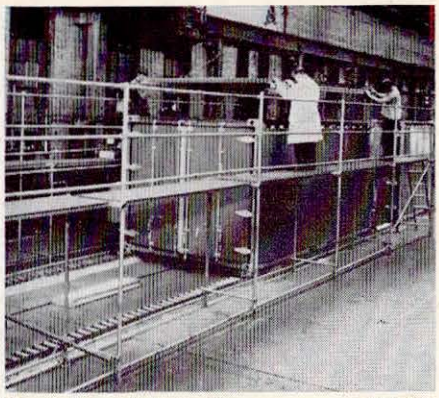
Adds services for growing containerization

Containerfreight Corp. (OTC) of Long Beach, Calif., is meeting a rapid growth in sea-going containerized shipments by enlarging its facilities on the West Coast. President Savery L. Nash said the company has opened a new Container Services Division in the San Francisco Bay area and hopes to have another similar facility operating in the Los Angeles area early this year.

NEW PRODUCTS REPORT

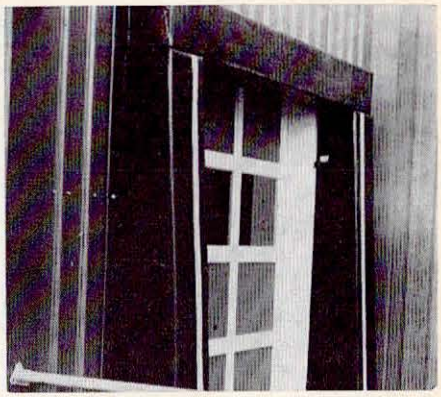
Draft gear (RA-1)

The NC-550 all-steel draft gear which has been granted AAR Certificate of Test Approval 47 after meeting all requirements of Specification M-901-E-62 is said to be the only 3-shoe M-901-E gear which can replace any other M-901-E gear as specified in Interchange Rules 17 and 101. It is for use wherever friction draft gears are preferred and for particular applications such as bulk lading cars subject to thawing shed operations. *National Castings.*



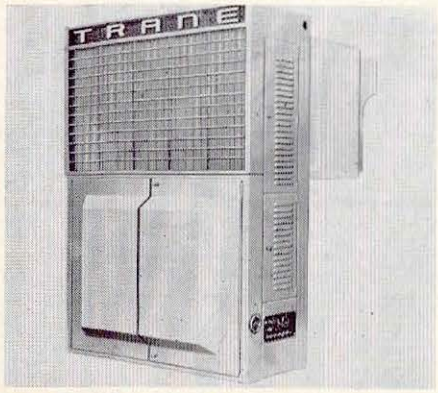
Container fabrication (RA-2)

Freight containers can be fabricated from these steel pipe work platforms, which can be adjusted in all directions to meet needs of a specific production line. An adjustable pipe locking device (ROTA-LOCK) which can be installed in 15 seconds, and instantly installed platform assemblies, are combined with standard steel pipe for these inexpensive, high-capacity production platforms. All platform components are completely reusable. *Up-Right Scaffolds.*



Dock seal (RA-3)

A completely new design of dock seal accommodates trailers parked on a declining approach. Sides of the dock seal are deeper at the bottom than at the top. The trailer coming down the decline contacts the seal at the top at the same time it contacts the bottom. This gives a uniform seal without overcompressing at the top with no seal at the bottom. The seal can be used with the manufacturer's new dock bumper. *T & S Equipment Co.*



Refrigeration unit (RA-4)

A Trane line of diesel and gasoline-LP gas-driven refrigeration units is now available primarily for use on trailers over 30 ft long hauling frozen and perishable goods at temperatures from —10 to +70 deg F with outside temperatures up to 125 deg F. The self-contained, nose-mounted units will fit standard trailer industry openings. Weight of gas-engine model is 1,150 lb; of diesel model, 1,525 lb. Holding 0 deg F inside the trailer with an ambient of 100 deg F, the DNL-4 diesel unit has a capacity of 18,500 Btu. The diesel model uses a British Perkins 4-108 engine with glow plugs and a high cranking rate starter for quick starts in cold weather. A Continental Y-91 engine powers the gasoline or LPG unit. The refrigeration system is a reverse cycle type and, with engines that run continuously, provides fully automatic heating, cooling or defrosting. On the heating cycle, cargo is protected from freeze damage down to —30 deg F ambient. With the evaporator acting as a condenser on the heating cycle, complex condenser shutters are eliminated. *Trane Co.*

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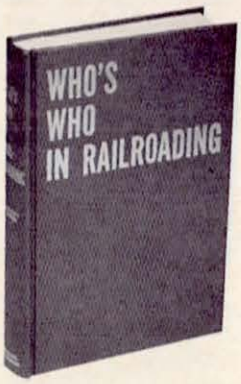

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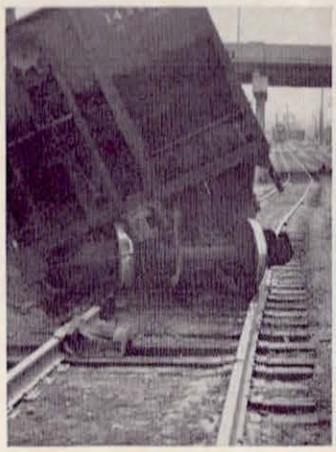

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Circle 34 on coupon page 103

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Advertisers' Index

Abex Corporation 48-49, 59
ACF Industries, Inc., American Car & Foundry Div. 54-55
Baldwin-Lima-Hamilton Corporation, Standard Steel Div. 15
Brenco Incorporated 23
Buffalo Brake Beam Company ..... IFC
Cardwell Westinghouse Company 29
Dorsey Trailers, Inc. 42
Dresser Transportation Equipment Div., Dresser Industries 88-89
Ellcon National, Inc. 4
Farrel Corporation 18
General Railway Signal Company 24
General Steel Industries, Inc. Casting & St. Louis Car Div. 13
Greenville Steel Car Company 66-67
Hayes Track Appliance Company 104
Henkels & McCoy, Inc 73
International Car Corporation 94
International Nickel Co., The 39
Kaiser Aluminum & Chemical Corporation 95
Kinnear Corporation 98
Magor Division, Fruehauf Corporation 14
Marquardt Industrial Products Company 37
Miner, Inc., W. H. 6
National Castings Div., Midland-Ross Corporation 56-57
National Lead, Magnus Metal Division 92-93
New Departure/Hyatt Bearings, General Motors Corp. 16-17
Portec, Inc., Railway Products Div. ..... BC
PPG Industries ..... IBC
Pullman Standard Div. of Pullman Inc. 20-21
Railway Educational Bureau 104
Railway Maintenance Corp. 96
Rockwell Manufacturing Co. LFM-Atchison Div. 69
Seaboard Coast Line Railroad 22
Servo Corporation of America 83
Sperry Rail Service Div., Automation Industries, Inc. 44
Standard Railway Equipment, Division of Stanray Corp. 60-61
Stromberg-Carlson 3
Stucki Company, A 9
Superior Diesel Filter Company 38
Timken Roller Bearing Company—RR Division, The 62-63
Universal Railway Devices 10
WABCO-Westinghouse Air Brake Co., Westinghouse Air Brake Div. 40-41
Western-Cullen Division, Federal Sign & Signal 97
Youngstown Steel Doors 19

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VIEWPOINT

What's right with the railroads

Nearly everybody knows what's wrong with the railroads. The newspapers see to that. It is a newspaper's job, after all, to report not the ordinary but the extraordinary; not what goes right but what goes wrong.

So much *is* wrong with the railroads—indeed, with all transportation—that it is all too easy to forget the many things that are right.

This week's issue of Railway Age—recording the awesome physical proportions of the transportation job railroads performed in 1968, and projecting an even greater role in 1969—is a satisfying reminder that railroads, for all their well-publicized problems, for all the internal quarrels and external inequities that afflict them, remain a vital and irreplaceable force in the nation's commerce.

Railroads are viewed by some as a "dying" industry. But does $10.8 billion in the till sound like a death rattle? That's what railroads grossed in 1968. The $11-billion milepost is almost certain to be passed in 1969.

Those who make a living selling equipment and supplies to the railroads often grumble—and with good reason—about the peak-and-valley buying patterns that disrupt their production lines. But when all the peaks and valleys are evened out, the fact remains that the vendors still collected $3,430,000,000 last year. In 1969, the intake will be in the very respectable neighborhood of $4,000,000,000.

It is often pointed out that giantism is no guarantee of survival: If it were the tyrannosaurus rex would not be extinct.

But railroads are offering the nation considerably more than bigness. They are doing not only a bigger job than ever but, in many ways, a better one; and they are beginning to tool up to further narrow the gap between what railroad service is, and what it ought to be.

To all who think the railroads are content to provide yesterday's transportation for today's customers while they wait for the arrival of the undertaker tomorrow, we commend a careful reading of the reports which our technical editors have prepared for this issue—Fred Houser, for the mechanical side; Merwin Dick, for track and structures; Bob McKnight, for signaling and communications.

The worst that can be said of the industry (and it's bad enough) is that not enough is being done, and that what is being done isn't being accomplished fast enough.

NO ROOM FOR DEFEATISM

But strides are being made—and those who are so blinded by the problems that they can't see the progress are doing themselves, and their industry, a disservice.

In the weeks and months to come, we will continue to seek out and try to illuminate the weak spots in our industry's armor, as the experts whom we talk to see them.

But we will also pause, now and then, to inspect the armor itself and to remind ourselves that it is fundamentally strong.

Criticism, yes; defeatism, no. The future belongs to those who can tell the difference.

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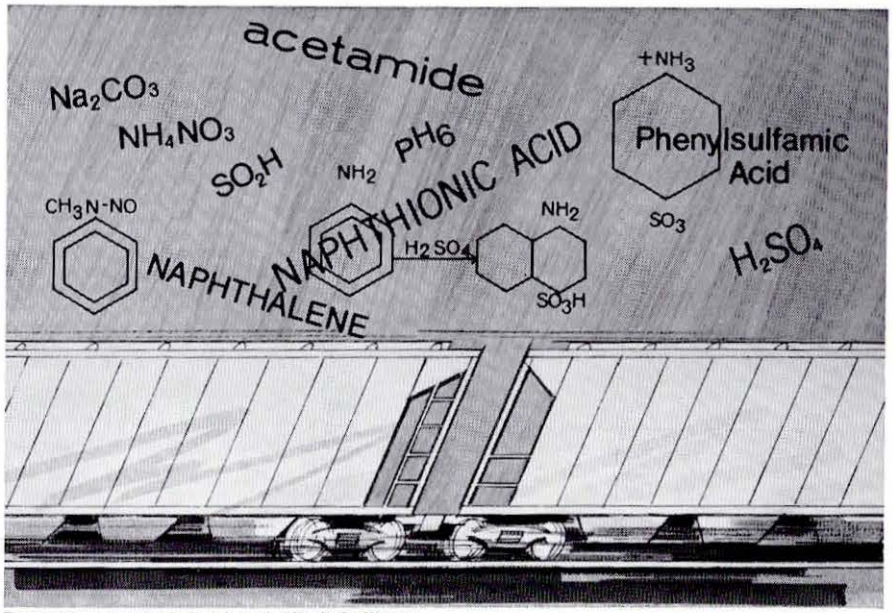

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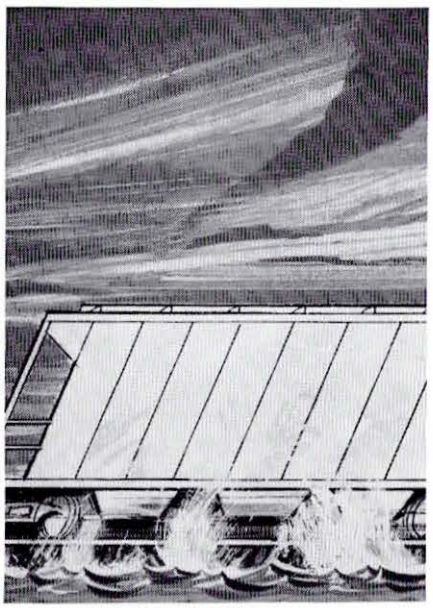
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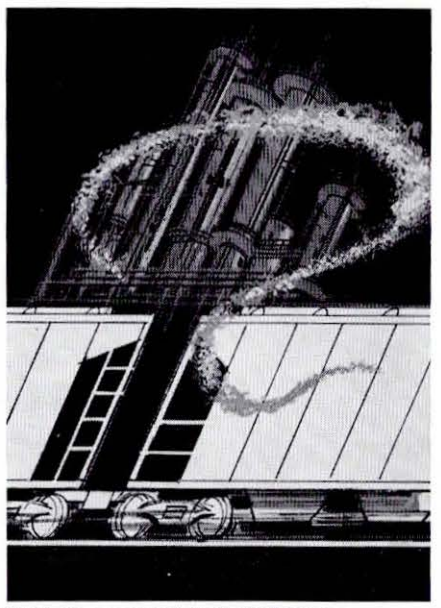
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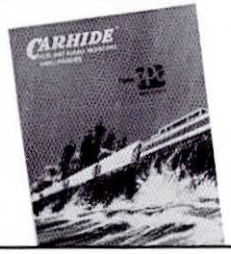

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